

It is believed that the examined claims are allowable over the cited art in view of the amendments to the claims and the following remarks. Accordingly, Applicants respectfully request that the claims of Species I, sub-species B (claim 36) be rejoined for consideration and examination, along with newly added linking claims 52 and 53.

I. Rejections Under 35 U.S.C. §112

Claim 34 has been rejected under 35 U.S.C. §112, second paragraph as indefinite because it is unclear which product recited in claim 33 is being referred to in claim 34. Claim 34 has been amended to clarify the claim by removing the recitation of “a product of claim 33,” thus obviating the rejection. Claim 37 has been rejected as indefinite for lack of antecedent basis for the term “the disk space.” Applicant has amended the claim to provide proper antecedent basis.

II. Rejections Under 35 U.S.C. §102

Claims 34 and 37 stand rejected under 35 U.S.C. §102(e) as anticipated by Gayer et al., U.S. patent No. 6,214,049 (“Gayer”). Applicants respectfully submit that the Examiner has failed to consider *all* of the limitations applicable to claims 34 and 37, including base claim 1 and intervening claim 33 (and formerly claim 10). In particular, claim 1—both prior to and after the present amendment—specifically requires 1) “combining purified collagen, an osteoinductive substance, and water containing dilute acid in a dispersing assembly comprising two vessels,” 2) forcing the mixture “from vessel to vessel” a number of times to obtain a dispersion, and 3) “allowing the dispersion to stand.” Gayer neither teaches nor suggests the use of collagen treated by such a method, and the claims are allowable over Gayer on that basis alone.

Indeed, contrary to the Examiner’s assertion at page 4 line 13 of the Office Action, Gayer does not even disclose a spinal cage as that term is ordinarily used. Specifically, spinal cages usually comprise a generally cylindrical or conical element having a hollow bore coaxial with the cylinder or cone. While it is acknowledged that the implant device disclosed by Gayer is intended for use in spinal fusion, like a spinal cage, it is clear from the disclosure that there is no hollow bore in the device. Instead, the Gayer device is a solid cylinder having a “core” 104 or 304 to which “fibrillar wires or prongs” 102, 302 (Figs. 1, 3; col. 7 lines 13, 41) are attached. Such a device is not a fusion cage and thus collagen treated as recited in claim 1 cannot be inserted *into* a spinal cage, as specifically recited in claim 33, from which both claims 34 and 37 depend. Moreover, the portions of Gayer cited by the Examiner, in

connection with Figure 7, refer to the use of collagen as a *coating* on the *fibrillar wires* attached to the implant, not to collagen as being inserted inside or *into* the implant. Accordingly, the failure of Gayer to recite a spinal cage provides another basis for allowance of the claims.

Finally, Applicants have amended claim 1 to more distinctly point out why the collagen is passed between the two vessels, namely to provide a dispersion that is thickened as compared to collagen gels or dispersions not so treated. Nothing in Gayer even remotely suggests thickening the collagen used to coat the fibrillar wires attached to the implant core. Accordingly, it is respectfully submitted that both claims 34 and 37 are allowable over the cited art.

III. Rejoinder Of Remaining Claims

In view of the foregoing amendments and remarks, it is believed that the examined claims are allowable over the art of record. Accordingly, consideration of the remaining claims of sub-species B of Species 1 is now proper, and Applicants therefore respectfully request an indication of allowability for claims 34 and 37 as well as rejoinder of at least claim 36 (sub-species B of Species 1), and linking claims 52 and 53 for consideration and examination.

June 30, 2003
Date

Respectfully submitted,



Kenneth S. Barrow
Reg. No. 36,085
CENTERPULSE USA INC.
12 East Greenway Plaza, Suite 1000
Houston, Texas 77046

Phone: (713) 561-6367
Fax: (713) 561-6380



CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Assistant Commissioner for Patents
Washington, DC 20231

on June 30, 2003
(Date)

Heather Green
(Name of person making deposit)

Heather Green
(Signature)

RECEIVED

JUL 09 2003

TECHNOLOGY CENTER H3700